

# Proceedings of the Iowa Academy of Science

---

Volume 36 | Annual Issue

Article 98

---

1929

## Mentality, Achievement, and Class Survival

Willis J. Bell

*Iowa Wesleyan College*

*Let us know how access to this document benefits you*

Copyright ©1929 Iowa Academy of Science, Inc.

Follow this and additional works at: <https://scholarworks.uni.edu/pias>

---

### Recommended Citation

Bell, Willis J. (1929) "Mentality, Achievement, and Class Survival," *Proceedings of the Iowa Academy of Science*, 36(1), 309-312.

Available at: <https://scholarworks.uni.edu/pias/vol36/iss1/98>

This Research is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

# MENTALITY, ACHIEVEMENT, AND CLASS SURVIVAL

WILLIS J. BELL

Some years ago, in a college where intelligence tests and uniform grading procedures were still strangers, I made a very simple investigation to learn whether faculty's grades and students' mental ratings tallied appreciably. This of course has been done likewise in many another institution, and much more exhaustively than I did it.

Our grading system was the familiar A, B, C, D, E, F one, in which E and F stood for condition and failure. Instructors in those days had no knowledge of individuals' mental scores, and few of them wanted to have. However, this chart, pertaining to the freshman class of that year, indicates that within the year's time they found out approximately the same things as had been privately discovered in an hour and a quarter the previous fall by means of the intelligence tests.

Table I—(1) is mentally highest fifth of class. (2) is mentally middle two-fifths of class. (3) is mentally lowest fifth in class

% of	E and F	D	C	B	A
(1)	0	2.6	29.6	50	18.3
(2)	4.8	8.4	47.5	30.4	6.2
(3)	7.1	38.5	35.7	18.6	0

This table reads that of the mentally highest one-fifth of the one hundred forty freshmen, no grades were below passing, 2.6% were D, 29.6% C, 50% B, and 18.3% A; while the mentally lowest one-fifth of the class 7.1% of grades were below passing, 38.5% were D, 35.7% C, 18.6% B, and no grade reached A. The middle three-fifths of the class came through as indicated, with small earnings of either A or of below passing. The italic numbers show that the gifted group was strong on B's, the middle three-fifths did very similarly with C's, and the least-gifted group made its greatest hit with D's.

Of course the curve is skewed considerably, and of course a few instructors skewed tremendously, but that is to be expected. Some teachers make their A's dirt-cheap. To paraphrase a familiar cartoon title from the newspapers, "There's at least one on every faculty." Sometimes there are several.

In those days there appeared to be some occasion for alarm at our college because the annual mortality was heavier in the more capable sections of the class than in the less capable. To be sure, the departing geniuses may have been continuing their studies in other and larger institutions; but that left little consolation to us who had to carry on with such material as they, departing, left behind them.

Iowa Wesleyan College seems to have about the same general run of ability among its entering students as other colleges have. It was noticed a year ago that of Chicago University's 530 freshmen only sixteen scored higher in the American Council test than our Wesleyan highest; also, of some 17,000 freshmen reported last fall from sixty-odd colleges only 330 excelled the record of our highest, which means we reached the 97½ percentile among the 17,000.

A few years ago we adopted the honor-point system whereby each semester hour of A counts three points, each hour of B two points, of C one point, and of D no point, and all who thus earned a certain specified number of these points per semester were published as being on the "Honor Roll."

This table shows for each semester who among last year's and this year's freshmen earned this distinction.

*Table II — Number on honor roll from each ¼ of class. (Two classes)*

1928	Low ¼	MIDDLE TWO FOURTHS		High ¼
January	1	2	9	15
June	2	4	12	19
1929				
January	1	1	3	15

This shows that of the twenty-seven thus honored in January, fifteen were from the mentally highest ranking quarter of the class, nine from the second-highest quarter, two from the third, and one from the lowest, while in June of the same year the contributions of the four quarters were respectively nineteen, twelve, four and two. The January, 1929, contribution of the next class was fifteen, three, one, and one, respectively.

During the present semester I have re-examined the old question as to what sort of students were leaving us, and what sort were sticking on. The evidence from previous years, already cited, of some general dependability of instructors' grades gave assurance that the students' number of points earned would bear some reliability as a measure of the quality of the work they were doing. My task then was simple enough, and might properly have been

delegated to some upper-class students to study and report on, but for the likelihood that some students themselves might object to the possible muck-raking of their mental statuses by mere fellow-students.

The freshman class that entered in the fall of 1926 has now been with us five semesters prior to this spring. This table shows what has happened within their ranks during that time.

*Table III — Freshmen of 1926. Numbers in parenthesis are survivors, numbers outside parenthesis indicate average point earnings per individual in each respective group of survivors*

SEM.	Low $\frac{1}{4}$	MIDDLE TWO FOURTHS		High $\frac{1}{4}$
I	(33) 8.93	(33) 14.50	(33) 21.69	(33) 29.93
II	(24) 13.58	(24) 21.04	(32) 22.57	(28) 29.89
III	(11) 12.09	(14) 20.02	(18) 23.55	(21) 31.20
IV	(9) 17.77	(13) 22.00	(13) 27.69	(20) 32.65
V	(4) 24.25	(13) 19.90	(9) 20.55	(11) 33.09

Table III reads that the thirty-three students of the mentally lowest quarter earned an average of 8.93 points in their first semester. In the second semester nine had dropped out of college, and the remaining twenty-four averaged 13.58 points. For the third semester the eleven survivors of the original thirty-three averaged 12.09 points. Two more quit, and the remaining nine averaged 17.77 points for the fourth semester. Finally, for semester V, which was the first half of their third year in college, only four came back, and these made the comparatively remarkable showing of 24.25 points apiece, on an average.

It appears that the highest mental quarter of the class during that time dwindled from thirty-three successively to twenty-eight, twenty-one, twenty, and eleven, while their point-earnings averaged successively 29.93, 29.89, 31.20, 32.65, and 33.09. The middle two quarters may be read likewise, and the general trend of the whole class seems to be toward a loss of more of the weaker students than of the abler ones.

Before leaving this table, a further comment may be in order regarding the high showing of the four survivors of the low group in the fifth semester. Although they received four times 24.25 points, a total of ninety-nine, forty-two of the ninety-nine were earned by just one individual, leaving fifty-seven points to divide among the other three. And that one individual, besides being

perhaps extra industrious, had the added advantage of carrying the most of his work in a department where A's are at their cheapest.

A similar showing, as far as it goes, is made by this table of the three semesters now completed by the class that entered a year later, in the fall of 1927.

*Table IV — Freshmen of 1927. Survivors and point-averages indicated as in Table III*

SEM.	Low $\frac{1}{4}$	MIDDLE TWO FOURTHS		High $\frac{1}{4}$
I	(35) 10.00	(34) 14.29	(34) 20.68	(35) 29.94
II	(24) 17.41	(32) 21.37	(30) 25.40	(31) 32.45
III	(15) 17.40	(14) 20.57	(26) 20.07	(26) 30.46

Here the low quarter drops out from thirty-five through twenty-four, to fifteen; the high quarter from thirty-five through thirty-one to twenty-six; and the middle quarters show relatively similar changes. The averages of point-earnings correspond strikingly to those of the previous table.

The present year's freshmen have not been with us long enough to decrease greatly in numbers. At the end of the one semester which they have completed, the average point-earnings of the respective quarters were as shown in the next table.

*Table V — Freshmen of 1928. (As in Tables III and IV)*

SEM.	Low $\frac{1}{4}$	MIDDLE TWO FOURTHS		High $\frac{1}{4}$
I	(28) 11.48	(28) 15.00	(28) 21.29	(28) 30.39

On the showing of these data it seems now that our alarm of some years back may be allowed to subside somewhat. During at least the last two years and a half our mortality has been greatest just where we might prefer to have it. If other colleges are having a like experience, and if this dropping out is largely due to difficulty in keeping the pace set, then here is some indication that the great current problem of who should go to college is now tending in an appreciable degree to solve itself. Allowing as liberally as one may for the unreliability of teachers' grades, the trend with us seems unmistakable; for it is to be remembered that in nearly all cases our instructors had no knowledge of students' mental ratings.

IOWA WESLEYAN COLLEGE,  
MOUNT PLEASANT, IOWA.